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FEDERAL COMMUNICATIONS COMMISSION

47 CFR Parts 1, 2, 25 and 27

[GN Docket No. 18-122; RM-11791; RM-11778; DA 19-385]

International Bureau and Wireless Telecommunications Bureau Seek Focused Additional Comment in 3.7-4.2 GHz Band Proceeding

AGENCY: Federal Communications Commission.

ACTION: Proposed rule.

SUMMARY: In this document, the International Bureau and Wireless Telecommunications Bureau invite interested parties to submit more focused additional comment on the issues set forth below and any other issues commenters wish to raise concerning proposals for enabling additional terrestrial use of the 3.7-4.2 GHz band (C-band). As the Commission explained in its July 2018 Notice of Proposed Rulemaking (NPRM), the Commission's efforts to make this mid-band spectrum available for more flexible use will help close the digital divide by providing wireless broadband connectivity across the nation and secure U.S. leadership in next-generation services, including fifth-generation (5G) wireless and the Internet of Things.

DATES: Comments are due on or before **[INSERT DATE 30 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**; reply comments on or before **[INSERT DATE 45 DAYS AFTER PUBLICATION IN THE FEDERAL REGISTER]**.

ADDRESSES: You may submit comments, identified by GN Docket No. 18-122, by any of the following methods:

- Federal Communications Commission's website: <https://www.fcc.gov/ecfs/>. Follow the instructions for submitting comments.
- People with Disabilities: Contact the FCC to request reasonable accommodations (accessible format documents, sign language interpreters, CART, etc.) by email: FCC504@fcc.gov, phone: 202-418-0530 or TTY: 202-418-0432.

For detailed instructions for submitting comments and additional information on the rulemaking process, see the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Matthew Pearl of the Wireless Telecommunications Bureau, at Matthew.Pearl@fcc.gov or (202)418-2607, or Jim Schlichting of the International Bureau, at Jim.Schlichting@fcc.gov or (202)418-1547. For information regarding Initial Paperwork Reduction Act, contact Cathy Williams, Office of Managing Director, at (202) 418-2918 or Cathy.Williams@fcc.gov.

SUPPLEMENTARY INFORMATION: This is a summary of the Commission's document, DA 19-385, (IB, WTB May 3, 2019), GN Docket No. 18-122, RM-11791, RM-11778. The complete text of this document, as well as comments, reply comments, and ex parte submissions, is available for public inspection and copying from 8 a.m. to 4:30 p.m. Eastern Time (ET) Monday through Thursday or from 8 a.m. to 11:30 a.m. ET on Fridays in the FCC Reference Information Center, 445 12th Street SW, Room CY-A257, Washington, DC 20554. The complete text is available on the Commission's website at <http://wireless.fcc.gov>, or by using the search function on the ECFS web page at <http://www.fcc.gov/cgb/ecfs/>. Alternative formats are available to persons with disabilities by calling the Consumer & Governmental Affairs Bureau at (202) 418-0530 (voice), (202) 418-0432 (tty).

Comment Filing Procedures

Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 CFR 1.415, 1.419, interested parties may file comments and replies on or before the dates indicated on the first page of this document.

Comments and replies may be filed using the Commission's Electronic Comment Filing System (ECFS).

- **Electronic Filers:** Comments may be filed electronically using the Internet by accessing ECFS: <https://www.fcc.gov/ecfs/>. Filers should follow the instructions provided on the website for submitting comments. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket number, GN Docket No. 18-122.
- **Paper Filers:** Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding,

filers must submit two additional copies for each additional docket or rulemaking number. Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th Street, SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of before entering the building.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554

People with Disabilities. To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer and Governmental Affairs Bureau at 202-418-0530 (voice), 844-432-2275 (videophone), or 202-418-0432 (TTY).

Initial Paperwork Reduction Act of 1995 Analysis

This document does not contain proposed information collection requirements subject to the Paperwork Reduction Act of 1995, Public Law 104-13. In addition, therefore, it does not contain any proposed information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4).

Ex Parte Rules

Pursuant to section 1.1200(a) of the Commission's rules, this Public Notice shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules. Persons making ex parte

presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with section 1.1206(b). In proceedings governed by section 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules.

Synopsis

1. In the NPRM,¹ the Commission sought to balance the desire to make this spectrum available for new terrestrial wireless uses in a rapid and efficient manner with the need to accommodate incumbent Fixed Satellite Service (FSS) and Fixed Service (FS) operations in the band. To that end, the Commission sought comment on both market-based and auction-based approaches for repurposing a portion or all of the C-band for flexible use licenses, as well as approaches that combine elements of market- and auction-based clearing mechanisms. Commenters have weighed in by supporting or

¹ See Expanding Flexible Use of the 3.7-4.2 GHz Band, Order and Notice of Proposed Rulemaking, 33 FCC Rcd 6915 (2018), 83 FR. 42043 (Aug. 20, 2018) (*Order*), 83 FR. 44128 (Aug. 29, 2018) (NPRM).

opposing a variety of clearing mechanisms, and their comments raise additional issues concerning the Commission's authority to employ elements of those mechanisms. The Commission now invites focused additional comment on the issues set forth below and any other issues commenters wish to raise concerning proposals for enabling additional terrestrial use of the C-band.

What are the enforceable interference protection rights, if any, granted to space station operators against co-primary terrestrial operations? Do those rights depend on the extent incumbent earth stations receive their transmissions within the United States? And what limits, if any, does section 316 of the Act place on the proposals raised by the Commission in this NPRM or by the commenters in this docket?

2. Space station operators use the 3.7-4.2 GHz band for downlink operations. Before transmitting in the band, a space station operator must receive either a license from the Commission or a license from a non-U.S. government along with a grant of market access by the Commission. Requests for U.S. market access through non-U.S.-licensed space stations require the same legal and technical information that the Commission's rules require for a license application for that space station. Whether a space station operator is a licensee or recipient of a market access grant, modifications to U.S. operations require Commission review. Importantly, the Commission's rules permit space station operators to transmit in the 3.7-4.2 GHz band on a nonexclusive basis from specific orbital locations.

3. Fixed terrestrial users have co-primary use of the 3.7-4.2 GHz band. Fixed terrestrial licensees may be assigned 20 megahertz paired channels for point-to-point common carrier or private operational fixed microwave links in the 3.7-4.2 GHz band and must comply with the frequency coordination procedures set forth in part 101 to be entitled to interference protection.

4. To implement a sharing framework for the band, the Commission's rules offer receive-only earth stations the option to register for protection against terrestrial fixed stations.² Such registration

² Consistent with the Commission's proposals in the NPRM for protecting incumbent earth stations that were operational as of April 19, 2018, for the questions in this document, the term "registered receive-only earth station operators" is intended to include applicants who had registration applications pending in IBFS as of the date the freeze exception filing window ended. Thus, the term would include applications that have not yet been processed by Federal Communications Commission staff, as well as applications without a showing of frequency coordination with terrestrial fixed service. See NPRM, 33 FCC Rcd at 6926, paragraph 27, 83 FR. at 44130.

occurs by filing applications accompanied by an exhibit demonstrating coordination with terrestrial stations. The purpose of this coordination requirement is to establish the baseline level of interference that an earth station must accept in frequency bands shared by the fixed terrestrial and fixed satellite services on a co-primary basis. The coordination results entitle the earth station to the interference protection levels agreed to during coordination. Or as the Commission's rules put it, "protection from impermissible levels of interference to the reception of signals by earth stations in the Fixed-Satellite Service from terrestrial stations in a co-equally shared band is provided through the authorizations granted under this part."

5. Against this backdrop, the Commission seeks targeted comment on the extent to which satellite space station operators have enforceable rights against harmful interference from terrestrial stations in the C-band under their space station licenses and market access grants. For C-band satellite space station operators, what is the scope of enforceable rights, if any, that they have under their space station licenses and market access grants? Is there any distinction between the enforceable rights, if any, accorded to U.S.-licensed space stations and non-U.S.-licensed space stations that have been duly approved for U.S. market access? Commenters should discuss the specific statutory or regulatory provisions granting any such enforceable rights.

6. The C-Band Alliance argues that C-band satellite space station operators with no U.S. customers and no U.S. revenues should not be compensated in the C-band transition process. In contrast, the small satellite operators argue that any transition plan must "[c]ompensate fairly all satellite operators with satellites authorized by the Commission to provide C-band service in the United States for the loss of valuable spectrum that they are currently authorized to use to offer services" Do the enforceable rights, if any, of space station operators depend on the extent incumbent earth stations receive their transmissions within the United States? For instance, do space station operators have a right to transmit free from harmful interference only where there are registered earth stations receiving their signal? Do they have a right to transmit free from harmful interference anywhere in the contiguous United States? Do they only have the right to transmit on a non-exclusive basis? Or do they have some broader right to

preclude the Commission from adopting any policy that would impair their satellite service distribution business? To put it another way, to what extent are the enforceable rights of a space station operator dependent on, or derivative from, the rights of licensed or registered receive-only earth stations that receive that space station operator's signal?

7. T-Mobile has suggested that, as a technical matter, new, flexible-use terrestrial operations would not suffer harmful interference from downlink signals but could cause harmful interference to licensed or registered receive-only earth stations in the band. Is this correct? If so, how should it impact the Commission's analysis given that new flexible-use operations could cause harmful interference to licensed or registered receive-only earth stations in the band?

8. Section 316 of the Act gives the Commission authority to modify entire classes of station licenses by rulemaking or adjudication, but that this authority has been interpreted not to extend to any "fundamental change" to the terms of a license. What obligations, if any, does section 316 of the Communications Act (or any other provision of the Act) impose on the Commission with respect to space station operators if the Commission were to authorize new terrestrial operations in the band under any of the proposals in the NPRM or the record? Does section 316 require that the Commission ensure the receipt of downlink transmissions where there are registered earth stations receiving a space station's signal? Does section 316 require the availability of comparable facilities for such locations? Does section 316 create obligations in areas where there are no registered earth stations?

9. So long as a satellite operator's transmission rights are not disturbed, would section 316 even apply if the Commission authorized additional terrestrial use that could interfere with the receipt of the signal? If so, under what circumstances and to what extent? And would section 316 apply to a satellite operator that was permitted, after the Commission adopted changes to the band in this rulemaking, to continue to transmit on a non-exclusive, shared basis?

10. If section 316 does impose obligations on the Commission regarding satellite licensees or market access grantees, how should the Commission measure comparability in the context of these proposals? Of what relevance here are the Commission's prior actions to ensure that incumbents required

to vacate spectrum receive comparable facilities, or to provide options when modifying the holdings of existing licensees?³

What are the enforceable interference protection rights granted to licensed or registered receive-only earth station operators against co-primary terrestrial operations? What obligations does section 316 of the Act places on the Commission vis-à-vis licensed or registered receive-only earth station operators? Are registered receive-only earth station operators eligible to voluntarily relinquish their rights to protection from harmful interference in the reverse phase of an incentive auction because they qualify as “licenses” under § 309(j)(8)(G)? Does the Commission have other statutory authorities that would enable it to authorize payments to such earth stations to induce them to modify or relocate their facilities?

11. Receive-only earth stations cannot cause interference, but under the Commission’s current rules they can be coordinated and licensed or registered with the Commission to protect them from terrestrial fixed services.⁴ On April 19, 2018, the International Bureau temporarily waived the coordination requirement for earth station applications filed during a window that closed on October 31, 2018. Registrations or licenses granted for applications filed during the window without the coordination report will include a condition noting that the license or registration does not afford interference protection from fixed service transmissions. Upon announcing the termination of the freeze, the International Bureau may modify or terminate the waiver by requiring or permitting registrants or licensees who filed applications within the window without a coordination report to file such a report as required by the Commission’s rules, and to take any appropriate action in light of such filing.

³ See, e.g., 47 CFR 101.73(d), 101.75(b), 101.89(d) (comparable facilities defined in terms of throughput, reliability, and operating costs); Improving Public Safety Communications in the 800 MHz Band et al., *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order*, 19 FCC Rcd 14969, paragraph 68 (2004); Use of Spectrum Bands Above 24 GHz For Mobile Radio Services, et al., GN Docket No. 14-177, *Fourth Report and Order*, FCC 18-180, at paragraph 15 (Dec. 12, 2018).

⁴ 47 CFR 25.131(b) (filing requirements and registration for receive-only earth stations). Receive-only earth stations in the Fixed Satellite Service that operate with U.S.-licensed space stations, or with non-U.S.-licensed space stations that have been duly approved for U.S. market access, may be registered with the Commission in order to protect them from interference from terrestrial microwave stations in bands shared co-equally with the Fixed Service in accordance with the procedures of §§ 25.203 and 25.251, subject to the structure in § 25.209(c). Receive-only earth stations must be licensed in cases where they seek to operate with non-U.S.-licensed space stations that have not been approved for market access. See 47 CFR 25.131(j).

12. The NPRM proposed to protect incumbent earth stations from harmful interference as the Commission increased the intensity of terrestrial use in the band.⁵ What is the scope of the right of such users to protection from harmful interference? What obligations, if any, does section 316 of the Communications Act (or any other provision of the Act) impose on the Commission vis-à-vis licensed or registered receive-only earth station operators if the Commission were to authorize new terrestrial operations in the band under any of the proposals in the NPRM or the record?

13. The Commission seeks comment on whether licensed or registered receive-only earth stations have licensed spectrum usage rights, as defined in the Communications Act of 1934, as amended (the Act). Section 309(j)(8)(G) of the Act, provides that the Commission “may encourage a licensee to relinquish voluntarily some or all of its licensed spectrum usage rights” as part of an incentive auction. This provision, however, does not define the term “licensee” or “licensed spectrum usage rights.” Section 3(53) of the Act defines “license” as “that instrument of authorization required by [the Act] or the rules and regulations of the Commission made pursuant to [the Act], for the use or operation of apparatus for transmission of energy, or communications, or signals by radio, by whatever name the instrument may be designated by the Commission.” The “transmission of energy . . . by radio,” in turn, is defined to include “all instrumentalities, facilities, and services incidental to such transmission.” In light of these and any other statutory provisions that may be relevant, how should the Commission interpret “licensed spectrum usage rights” as it may apply to any of the proposals either advanced by the Commission in the NPRM or raised in comments filed in this docket?

14. Receive-only earth stations do not transmit “energy, or communications, or signals” and most have not been eligible for a Commission license since 1991. However, in adopting the receive-only

⁵ See NPRM, 33 FCC Rcd at 6926, paragraph 27, 83 FR. at 44130. The Commission sought comment on how to define the appropriate class of incumbents for protection. For earth station licensees and registrants, the NPRM proposed to define incumbent stations as earth stations that: (1) were operational as of April 19, 2018; (2) are licensed or registered (or had a pending application for license or registration) in the IBFS database as of October 17, 2018; and (3) have timely certified the accuracy of information on file with the Commission to the extent required by the Order. *Id.* The filing deadline was subsequently extended until October 31, 2018. International Bureau Announces Two-Week Extension of Filing Window for Earth Stations Currently Operating in 3.7-4.2 GHz Band, Public Notice, 33 FCC Rcd 10054 (IB Oct. 17, 2018).

earth station registration program, the Commission provided that “a registration program will afford the same protection from interference as would a license issued under our former [licensing] procedure.” Do licensed or registered receive-only earth station operators meet the definition of licensees that have licensed spectrum usage rights that they could voluntarily relinquish in an incentive auction? Some commenters argue that registered earth stations have licensed spectrum usage rights, while other commenters argue that earth station registrations are not licenses under § 309(j)(8)(G). At least one commenter suggests that the Commission consider holding a reverse auction in which incumbent receive-only earth station registrants and satellite licensees would compete to submit winning bids to clear a PEA. Does the Commission’s incentive auction authority allow it to structure a reverse auction in which satellite operators and licensed or registered receive-only earth station operators compete to relinquish their spectrum usage rights? What, if any, legal authority does the Commission have to structure an incentive auction that would award initial licenses for mobile operations in the band subject to protecting or reaching agreements with licensed or registered receive-only earth stations? For that matter, do non-U.S.-licensed space station operators granted market access meet the definition of licensees that have licensed spectrum usage rights that they could voluntarily relinquish in an incentive auction?

15. If an incentive auction approach is unavailable, does the Commission have other statutory authorities that would enable it to authorize or require payments to licensed or registered receive-only earth stations to induce them to modify or relocate their facilities? One commenter argues that §§ 303(c), 303(r), and 4(i) of the Act, and specific Commission precedent, provide the Commission with ample authority to require that proceeds from a Commission auction or a private sale of spectrum usage rights to be shared with registered receive-only earth stations as well as with the U.S. Treasury. Another commenter maintains that the Commission recognized the important role of receive-only earth stations in the NPRM when it asked whether, “[i]nstead of paying [fixed satellite] operators for relinquishing spectrum usage rights nationwide, or in specific geographic regions, a mechanism instead might pay earth stations for relinquishing access to C-band spectrum in specific geographic areas.” Are there any other rules or sources of authority the Commission should consider in addressing the question of how to

accommodate licensed or registered earth station operators that may be displaced as a result of repurposing of the C-band? Are there any equitable or public policy factors the Commission should take into consideration?

FEDERAL COMMUNICATIONS COMMISSION.

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